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and preserving objects of
natural history.

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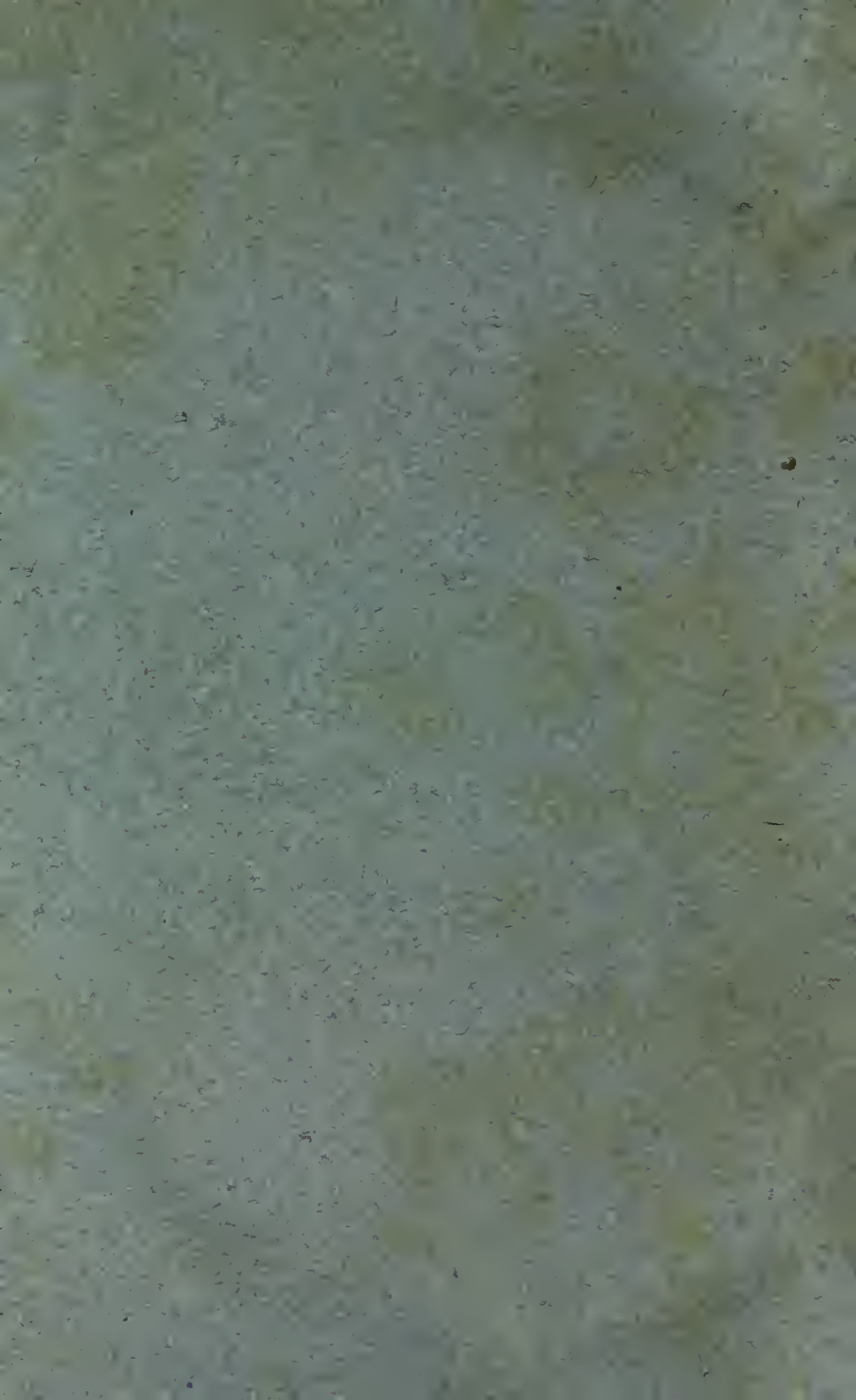
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Peter, Robert

Collecting and Preserving Objects
of Natural History...







ART. IX.—*On the mode of Collecting and Preserving objects of Natural History, with a view to the formation of a Cabinet, or to their transportation.* Read before the Medical Society of Lexington, by ROBERT PETER, M. D.—and published at its request.

IN selecting this subject for the basis of a few remarks, I was prompted by the evident interest expressed by your late resolutions in the cause of natural science; and by a desire to contribute my mite, however small, to aid in the laudable enterprise in which you have embarked; viz. the formation of a Museum of Natural History.

Interesting and attractive as the works of nature always are, to the man of observation in any part of the world, those of our own beloved West, for variety, number and beauty, are not perhaps to be surpassed in any quarter, while they possess this still further incentive to their study, that they have, as yet, been comparatively little examined by naturalists. Fascinating as this study is of itself, it cannot but be doubly interesting and instructive to medical men. We accordingly find, that among them nature has always found her warmest and most enthusiastic admirers. The study of medicine is in fact the study of nature; and the insight into her many works, necessarily given in that amount of knowledge which is requisite to constitute a practitioner, often elicits a desire for still further investigation.

The formation of a museum is one of the best modes of facilitating this study. Objects from all the kingdoms of nature placed side by side, can be examined and compared, and all their points of peculiarity as well as all those resemblances which connect them together into one great chain, extending from the green patch of lichen upon the rock, up to man himself, can with peculiar advantage be traced out.

Of all this, however, you are fully convinced, and I shall, consequently, proceed immediately to the subject proposed.

Much of the beauty of zoological specimens depends on

the care taken in their procurement and preservation. The gun affords one of the best means of obtaining objects for the zoological cabinet. In shooting for this purpose we must employ the smallest size of shot which can be efficient, and always shoot from such a distance as not materially to injure the skin or plumage of the quadruped or bird we shoot at. We should be provided with cotton-wool, wrapping paper, writing paper, and a pencil. As soon as the animal falls we should immediately run up and secure it, to prevent it, if a bird, from injuring its plumage by its struggles, and in order to search out the shot holes and plug them with cotton, that the blood may not escape upon its feathers; an accident always to be avoided, the blood having the effect of matting them together in a very unseemly manner, and being so difficult to wash out, that it is scarcely ever attempted except in very rare and valuable specimens, in which case it is done by careful sponging with tepid water. The plumage, however, never looks so well after this ablution as it did in its natural state. In most quadrupeds, except those with very fine and light coloured fur, the process of washing succeeds much better, and we are not, consequently, under the necessity of taking so much pains to avoid the spotting of their coats with blood.

If the bird should only be badly wounded, but not killed, the best mode of putting an end to its sufferings is, to squeeze its chest for a few moments with the finger and thumb applied on each side, immediately under the wings; this compresses its lungs, and soon suffocates it. A little cotton is now to be stuffed into its throat and nostrils, to prevent the escape of any fluid which would soil its plumage, and in some birds it will also be necessary to insert a small quantity into the vent, for a similar purpose. If the crop is much distended it had better be previously emptied by holding the bird up by the legs and pressing the contents out through the mouth. Having arranged its plumage, the bird may be placed head foremost into a paper cone, formed as the grocers usually make them to contain tea, &c. and after insert-

ing also a small note of the observations made upon the bird, the end of the cone may be closed up, and it may be placed in the game-bag, or what is still better, in a tin vasculum, similar to that used in herborising.

It will be found of very great advantage in stuffing and setting up a bird, or other animal, in a cabinet, in a natural position, to make as accurate an observation of its habit and manners as possible. For example, if a bird, observe whether he perches, whether in perching his body is held horizontally or obliquely, whether his wings droop, or are crossed over the tail, the position of the latter, the degree of extension of his legs, the carriage of the head &c. &c. The colour of the iris of the eye and the legs should also be observed, as they often change in death. A note of all these observations should be made with the pencil on a small piece of paper, and should be placed in the cone with the bird.

On a warm day, and in southern climates, decomposition commences its ravages so soon after the death of the animal, that if no precautions be taken, the lapse of a few hours will be sufficient to render a delicate bird unfit for preservation; the cuticle will begin to separate, especially on the abdomen, and the feathers will be rendered loose. The best mode of preventing this rapid decomposition, in the field, is to fill the box, or bag, in which the specimens are carried, with fresh juicy green vegetables, as mint &c. which will keep down the temperature by the evaporation constantly taking place from them until they are wilted and dry, when they are to be changed for fresh plants.

After permitting the animal to remain long enough to cool, and for its blood to coagulate, or to be absorbed from its vessels, so that it may not flow from our incisions, and thus embarrass the process, we proceed next to skin it, preparatory to stuffing. We shall first give the manner of proceeding with this end in a *quadruped*.

The animal is to be laid on its back on the table, with its head to the left hand, and an incision is to be made the whole length of the abdomen. The skin is to be separated

by means of the fingers and the knife until the upper ends of the extremities are exposed; these are now to be divided at the second joint from the foot, and the tail is also to be separated from the body at its root. The body may now be suspended by means of a hook, or a piece of cord, and the skin is to be separated from the back, and the skinning continued over the neck and head until it remains attached only at the jaws around the outside of the mouth. In skinning the head, we must be careful to cut off the ears deep down into the skull, and must avoid cutting the eyelids. The body may now be separated from the head, between the latter and the first vertebra of the neck, and laid aside to serve as a model for the artificial body which is to be substituted. The head is to be perfectly cleared of all its soft parts—the tongue, and eyes removed and the brain scooped out through the foramen magnum. Each of the extremities is now to be drawn out of the skin as far as the toes, and all the muscles and soft parts removed, the bones being left to give support to the body, and a natural appearance to the limbs. The tail may also be drawn out. This is sometimes difficult, but may easily be done in most cases by means of a split stick, with which the integuments are pressed back, while the tail is pulled out of them. All fat or other soft matter must now be removed from the skin, and if it is a large one, it has been recommended to immerse it for a day or two in a moderately strong cold solution of alum and salt, in order more fully to preserve it. This however, will be found in most cases unnecessary. The whole of the inside of the skin, all the bones &c. are now to be covered by means of a brush, with a coat of arsenical soap, made into the consistence of cream with water.

This soap, originally proposed by Becœur, has now stood the test of experience, and is the best preservative which is at present known. It may be formed by taking of

White soap,	32 parts,
Salt of tartar, or carbonate of potash,	12 do.
Quick-lime—slacked,	4 do.
White arsenic (arsenous acid,)	32 do.
Camphor,	5 do.

The camphor is to be pulverised in a mortar, previously adding a few drops of alcohol; the soap may then be added and worked into a soft paste with a little water, the other ingredients may then be well rubbed up with it, adding as much water as will make the whole of the consistence of butter. It may be kept in a wide mouthed bottle, or a covered jar, and will retain its virtues any length of time, merely requiring to be mixed with a sufficient quantity of water when it is to be used.

A more quick and effectual process, perhaps, is to mix all the ingredients, except the camphor, together over the fire, in a sufficient quantity of water; the camphor, pulverized, being added after the mixture has cooled.

Care must be taken during the whole of the process of skinning, to prevent the soiling of the skin by blood and other matters. And to prevent the embarrassment which the damp clammy nature of the freshly exposed surface of the flesh would cause in skinning small animals, causing the fur to stick and become soiled; it is better to be provided with some carb. magnesia, or. ground plaster of paris, with which to rub the flesh in order to destroy its adhesiveness.

Having given the skin and bones a good coat of the preservative soap, if it is intended to send the skin away without stuffing, it is to be drawn back over the head, having previously stuffed the orbits of the eyes and the cranium and the spaces occupied by the temporal muscles, with cotton, tow, hemp, or the long tree moss of the south. The leg bones are next to be wound with tow, as nearly as possible of the shape which they had when covered by their muscles, and the skin is to be returned over them. The skin of the tail is to be stuffed out to its natural size, by means of a piece of wire wound with tow, covered with the soap, and inserted into it; and the body is to be loosely stuffed out with any light vegetable matters, such as cotton, tow, spanish moss, or hay. The dimensions of the body, the colour of the eyes, and other necessary particulars, may then be noted on a piece of paper, which is also to be inserted into the body

with the stuffing. In this state, after the skins are sufficiently dry, they may be transported to any distance, after being securely packed in a tight box.

But if it is intended to set up the specimen in a natural position, and to make a finished preparation, the mode of procedure must be somewhat different. After having skinned it and coated it with the preservative, as before stated, it will be necessary to form an artificial body, and to introduce wires into the limbs, in order to support it. Five pieces of iron wire must be taken, of a size proportionate to the weight of the body they are intended to support; they must be previously made red hot in the fire, in order to destroy their elasticity. These must be each filed to a sharp point at one end. Four of these are to be introduced into the legs, and must be of such a length that after being introduced into the leg, and fastened into the artificial body, they will project several inches beyond the foot. The fifth wire is to be several inches longer than the body of the animal, including the neck and head. Upon this fifth wire we wind a quantity of tow, or other light vegetable material, as nearly as possible of the shape and size of the real body and neck of the animal, taking the denuded carcass as the model; commencing our winding close to that end of the wire which is not sharpened. Having formed the body to our satisfaction, and having given all the inside of the skin and the bones a coat of the preservative, and returned the head as before directed, we pass the pointed end of the wire up the neck, into the foramen magnum of the head, and through the skull and skin just between the eyes; leaving it projecting there until the animal is dry, when it may be cut off close to the skin. In some cases, when the skull is very hard, it will be necessary to pierce it previously with an awl for the passage of the wire.

The end of the wire which was introduced into the tail is now to be stuck into the body, and fastened there by bending; and a wire is to be introduced into each foot and run up each leg, by the side of the bones, and after a sufficient

quantity of tow has been wound on the bones of the leg to give it the natural size and shape, the wires are to be stuck into the body and strongly fastened there by bending and twisting.

The skin may now be sewed up; the needle being passed from within outwards, so as to avoid including the hair, passing it successively from one side to the other, until the whole of the incision is sewed up, taking care as the sewing progresses to add cotton, tow, &c. in any places where the stuffing is deficient. The hair may now be brushed down over the suture, which will completely hide it. It now only remains to place the animal in its proper position to dry, and subsequently to introduce artificial eyes made of glass.

In order to set the animal on its feet we must make a small platform of wood, by merely nailing two strips under a flat piece of board, to support it a short distance from the ground. In this board we make four holes for the passage of the wires which project from the feet of the animal, and the wires being passed through these holes and then bent backwards will hold the animal in an erect posture. We can afterwards, by bending the wires of the legs and body, give the animal any desired attitude. The nature and shape of the support on which we place the animal must of course vary according to the posture which we may wish to give it.

Having introduced small rolls of paper into the nostrils, to keep them distended, and placed each of the ears between two pieces of paste-board to prevent them from curling up, we put the animal in an airy place to dry. In some cases, it will be necessary to keep the lips together by means of a few stitches, and to support the head by fastening the wire which projects from it into an upright stick fixed into the platform.

The preparation of *birds*, although much care is requisite in keeping the plumage unruffled and free from the soil of blood or other matters, is, upon the whole, a more easy task than that of quadrupeds; as in the former the plumage, by

judicious management, may be made to cover many defects, whereas in the latter every little imperfection is easily visible.

The general character of the process is the same in birds as in quadrupeds, with some slight modifications. We place the bird in the same position, and pushing aside the feathers, make an incision through the skin from the top of the breast to the vent. The skin is then to be removed until the extremities are visible; the legs are to be separated at the second joint from the foot; the wings divided close to the body; and the tail cut through close to the insertion of the tail feathers, leaving a small piece of the rump attached to the skin. In the whole of the process, we must be very careful not to stretch the skin, as it would destroy the smoothness of the plumage, and we must employ a sufficiency of magnesia or powdered plaster of paris on the denuded flesh to prevent the feathers from sticking to it. Before skinning the neck it will be necessary to put cotton in the throat and nostrils, to prevent the escape of any liquid to soil the plumage, and to pass a string or wire through the nostrils, leaving the ends so long as to serve to lay hold of, when the skin of the neck is inverted over the head like the finger of a glove turned inside out, by which to draw it out again when the cleaning of the head is completed. The skinning is to be conducted as already advised, and the head to be separated from the first vertebra; the brain and tongue are also to be taken out, and the eyes withdrawn from within, by breaking through the bony palate. Then, having given the bones and skin a good coat of the arsenical soap, and stuffed the orbits, and the spaces before occupied by the muscles, with cotton, the skin is to be drawn back over the head. The thighs are now to be drawn out of the skin, and the muscles removed, and the whole inside of the skin and the surface of the bones covered with the preservative. In large birds it is necessary also to skin the wings as far as possible, to remove the soft parts, but in small ones this may be omitted. As a general rule, however, every soft part is as far as possible to be removed.

In the formation of the artificial body, we proceed very much as already indicated for quadrupeds, except that the wire on which we form it should be pointed at both ends, one end to be passed into the remains of the rump to support the tail, while the other end is passed up the neck, and through the skull at the front part of the head. We must of course make our artificial body and neck as nearly as possible of the size and shape of the real one. A wire sharpened at one end is now to be passed up each leg, beginning at the bottom of the foot, and a sufficient quantity of tow is to be wrapped around the wire and bone of the thigh to replace the flesh which was removed. The sharp end of the wire is to be firmly fixed, by twisting, into the body at the place where the legs are naturally attached, a sufficient length of wire being left projecting from the feet to fasten the bird to the stand on which it is to be placed to dry. The skin is now to be sewed up in the manner already indicated, taking care to avoid including any of the feathers. After bringing back the feathers in a natural manner over the suture, the bird may be placed and fastened on its stand by introducing the wires of its feet into suitable holes made for the purpose. The nature of the stand must vary according to the habits of the bird. If it perches, it may be formed by nailing a round stick horizontally on the top of a vertical one, which is fastened to a suitable foot to prevent it from upsetting. Two holes are bored in the horizontal stick to receive the wires of the feet, which, after being passed through the holes, are twisted around the stick to make them firm.

The bird is now to be placed in a natural attitude by bending the legs, neck, and body. The wings which hang loosely and in an unseemly manner, are to be pinned to the body by two wires passed through them; the plumage is to be smoothed and arranged, and it and the wings are to be kept in their proper places by thread wrapped loosely several times all around the body. The tail may be kept straight by means of a small piece of split cane, or small splints of wood tied

above and below at its root; the beak tied shut, and the head supported by tying it up, by means of the same thread which is used in closing the bill, to the wire that projects from the top of the head, which is to be bent down in a proper position for the purpose. The artificial eyes may now be introduced, and the eyelids carefully arranged over them, and the bird may be set aside to dry. When dry, the pins of the wings may be removed, the thread, &c. taken off, and the wire projecting from the forehead cut off close to the skin, and it may be placed in the cabinet.

When our object is merely to preserve the skin, with a view to stuff it at some future day, or to transport it to another part of the country, it will not be necessary to use the wires nor to form an artificial body, but after we have well cleaned the skin and the bones which are left, and covered the whole on the inside with the soap, we loosely stuff the neck, body and thighs, with cotton, and merely draw the cut edges of the skin together without sewing, placing in the skin the note of observations made on the bird while living, having added to it a note of the dimensions of the body which we have removed. Skins dried in this manner, wrapped in paper and packed in some soft material may be transported a great distance without injury, and may afterwards be stuffed and set up by softening the skin again by moisture, and giving it a fresh coat of preservative.

I have now endeavoured to give a general outline of the process of preserving quadrupeds and birds, but it must be evident to every one conversant with the great diversity of nature, that it would be impossible, in the short space to which I am restricted, to give all the varieties of the process to which this diversity gives rise. I consequently, leave much to be added by the ingenuity of the beginner, who in engaging in this pleasing occupation, will find much in which to consult his judgment, and much wherein his taste must direct him. Some few more particulars, however, seem to be necessary.

When large holes are made in the skin by shot, or other-

wise, an attempt may be made to stitch them up on the inside. When the head is so large, and the neck so small, that the skin of the neck cannot be passed over the head without stretching it, which in birds must always be avoided, a longitudinal slit may be made in the skin of the neck, which is to be sewed up again when the head is returned.

In large birds with fleshy feet, it will be necessary to make incisions in the bottom of the toes, to remove some of the soft parts, and to introduce some of the preservative. And in web-footed or palmated birds, the webs must be prevented from curling or shrinking in drying by pinning them out on the board on which the bird is placed to dry. Wires must be introduced into the wings of very large birds, and fastened into the body, in the same manner as the wires of the legs. In the whole of the process of preparation, it should be the aim of the preparer to give the animals as much the appearance of life as possible. The attitudes which he gives them should be graceful, natural, and varied, and should be founded on observations made on them in the living state. In this consists the perfection of the art, which peoples our cabinets with the timid songsters of the grove, and which by its magic almost makes us forget that they are mute.

Some observations are necessary on the preservation of other classes of animals, but they will not detain us long.

The different species of *Lacerta*, from the Alligator to the small scaly lizard of the woods and fences, called commonly "*scorpion*," may be prepared on the same general principles as the quadrupeds and birds. A great variety of these exists in the western country, which are highly interesting to the naturalist. In skinning these animals, it will be remarked that the integuments are so firmly fixed to the front of the skull that no attempts need be made to remove them. The small species may be obtained by means of a long switch with which they may be struck on the back, or by means of a hook baited with a fly. The soft-skinned species which live under damp logs, and under stones, and those which inhabit the water, called newts, "*ground pups*," or "*water*

dogs," had better be preserved in whiskey, which, upon the whole, is the most easy mode of preserving the small species of the sealey kinds also.

The various kinds of *Tortoise*, whether of the land or of the water, which possess a hard shell, may be stuffed with advantage. The soft shelled kinds make but bad dried preparations, and are generally preserved in whiskey.

In order to prepare a tortoise, we saw the connection between the upper and the lower plate of its shell, at the under part of the body at the side, and then cut the lower plate entirely out by separating the integuments close to this plate all around. All the soft parts are now to be removed from the shell and skin, the skull, and the bones of the legs being left, the brain, &c. well cleaned out. The inside is then to be covered with the preservative, and the neck, legs, tail and shell, filled out to their natural size by judicious stuffing with tow or other suitable materials. The skin is now to be stretched over the stuffing, by means of thread passing in all directions across from opposite points, being passed through it by means of a needle, so that when the lower plate is laid in its place none of the stuffing can be seen. The lower plate is to be fastened in its place by two pieces of wire, which fix it to the upper plate by means of holes, which perforate the two shells where the section was made with the saw. The head, body &c. being supported in a natural position, and the feet pinned out upon a board, the preparation is set aside to dry. And when dry, it may receive a coat of varnish, which, if we have taken the precaution, previous to stuffing it, of washing the shell well with a hard brush, will make its natural colours show to advantage.

The small kinds of *Snakes*, and other reptiles, may be preserved in clear whiskey, or a mixture of one part of alcohol and two of water; but the large kinds may be skinned. The best mode of procedure, in some cases, is to open the mouth and cut through the vertebra of the neck through the mouth, cutting the museles all around, and taking care not to cut the skin, the whole body may thus be skinned and drawn out

through the mouth. In some cases, however, it will be necessary to open the animal by an incision made down the side of the belly avoiding the abdominal plates. After it is skinned and has received a coat of the arsenical paste, fine dry sand may be poured into the mouth until the skin is completely and equally filled. It may now be arranged in a natural position, and set aside to dry, after which the sand may again be poured out and the skin varnished, after having supplied by means of water-colours any tints which may have faded from the skin. In pursuing this plan it will be necessary to avoid stretching the skin. This process may be used for snakes, frogs, toads, &c. &c., with the same general precautions which have already been given in reference to quadrupeds and birds. This mode may also be used with advantage in the preparation of some kinds of scaleless fishes.

The *Fish* of our waters are objects of considerable interest to naturalists both at home and abroad, but it is to be regretted that they are extremely difficult to preserve in all their beauty, most of their colours being so extremely evanescent, that whether we preserve them in spirits, or skin and stuff them, they are sure to fade; and the glossy appearance given them by their natural covering of mucus, is but imperfectly replaced by varnish.

The best process for stuffing these animals is that given by William Bullock, F. L. S. former proprietor of the London Museum, whether original with him, I know not. I will give it in his own words.

“Procure the fish, particularly if it be one of which the scales are large and loosely attached to the skin, as fresh as possible, lay it on its side, and cut out the gills with a pair of scissors, then introduce a little tow into the place to prevent the blood or moisture from flowing out. Then with a damp sponge carefully wipe the sides of the fish, raise the fins, and carefully extend them; cut two pieces of paper the shape of each fin but a little larger, rub a little mucilage of gum arabic on one of the pieces, and extend the fin on it, press the corresponding piece of paper on the other side, when it

will adhere, and drying in a few minutes, will keep the part extended, and preserve it from injury in handling or transportation. When this is completed, take a piece of thin silk paper, and neatly cover over one side of the fish; the natural gluten of the fish will cause it to adhere firmly to the scales, and it will presently dry and form a strong case over them, and admirably preserve them in their places whilst you take the skin off. After the first coat of paper is dry, it may be still further strengthened by applying another or two of paper slightly gummed; this when dry will not only keep the scales on, but will assist afterwards in retaining the fish in its proper form, by preventing distention. When these papers are thoroughly dry, turn the fish on a soft cloth, with the uncovered side upwards, and open it with sharp scissors, from the tail to near the nose, along the lateral line, which is observable in most fishes, cutting open the cheek to enable you afterwards to clear the flesh from that on the opposite side under the bone, for unless this be done, and that part filled with cotton, it will inevitably shrink, and have a bad effect. Care and a little practice will now be required in detaching the skin from the flesh: begin at the head and work downwards, using a sharp knife in separating the skin from the flesh, and cutting off the fin-bones on the inside with scissors. When this is completely done, by taking away as much animal matter as possible, for in this consists the perfection of preserving all skins, wipe the inside dry, and apply the arsenical soap, and then, using great caution not to distend unnaturally, or in one part more than another, fill the skin to its proper form with cut tow or cotton, and sew up the incision. It may then be dried in the shade, and in a few days the papers may be taken off, by dampening them with a sponge, the glass eyes may be introduced, and the skin covered with two or three coats of varnish."

The *Insect* tribe is so numerous and so diversified that volumes have been written on it alone, and the life of one man would scarcely be sufficient for its complete study. Yet it is, when fully examined, so replete with interest and wonder

that persons exist who have devoted themselves almost exclusively to this branch of nature. While so much that is more striking remains to be studied, in our country, it is not to be supposed that many will give much attention to this apparently endless pursuit, but there are, notwithstanding, many prominent objects in it which will attract the attention of the most careless observer of nature. It is therefore proper that we should give a few moments to the subject of the preservation of these animals, although time will not permit us to go into details.

Many of the nimble insects may be caught by means of a gauze net, made like the scoop-net of the angler, and fixed on the end of a cane. Many of them may be found under stones, or the bark of rotten logs, on decaying animal and vegetable matter, on trees and on plants, &c. The hard shelled kinds may be taken in the hand with impunity, only avoiding their pincers; none of them are venomous. The best mode of carrying them, and of sending them to a distance, is to provide a wide mouthed bottle filled with whiskey, in which a small quantity of corrosive sublimate has been dissolved, say one drachm to the pint. The insects are thrown into this liquid as soon as caught, and their vitality is almost immediately destroyed, and when the liquid is filled with them, the bottle may be filled up, a tight cork dipped in a mixture of tallow and wax inserted, and the mouth tied over with a piece of linen imbued with the same mixture. In this state they may be sent to any distance. To place them in the cabinet, they are to be removed from the liquid, a pin is to be passed through the upper part of the right wing, going through the body, by means of which they are stuck in shallow boxes the bottoms of which are lined with cork. Our limits will not permit us to enter into the details relative to the butterflies and other kinds of insects. Suffice it to say, that they are to be killed by heat, or by squeezing the thorax, and then stuck, by means of a pin, into suitable boxes.

The *Shells* of our rivers, ponds, and creeks, as well as those

commonly called snails, which frequent the land, have attracted much attention, being so numerous, and so peculiar and interesting, that perhaps no present would be more acceptable in the way of exchange, to a European naturalist, than a complete collection of them. The best water shells are found in the softest mud of our rivers and creeks. Those which have least erosion on their surface, and which contain the living animal, are to be selected; the dead sun-bleached shells of the shores being comparatively valueless. The animals may be removed from all kinds of shells by previously placing them in boiling water, and then picking them out. If any have an *operculum*, or covering for the mouth, this is also to be preserved. The Bivalve shells are to be tied round with a piece of thread to keep them shut until they are dry, and the whole may be packed in sawdust, paper, cotton or other soft materials.

Minerals require no other preparation than merely wrapping them in paper, with a note stating their locality. And it would be well enough to remark here, that as many particulars as possible relative to locality, habits, &c. should be enclosed with any specimen of natural history when sent away.

Petrifactions should be broken carefully off, with a small piece of the rock in which they are found attached, and as much information relative to the adjoining strata, as possible, should be given.

Preservation in spirits has been several times mentioned. It is admirably adapted for every variety of animal bodies which are too delicate, or too soft, for the process of stuffing. Whiskey, or any cheap low proof spirit, will answer the purpose, and the best mode of economising it, is to wrap the object, for example a fish, in a piece of muslin with a small piece of lead attached, bearing a number which refers to a catalogue sent. The specimens are then packed with tow in the bottle or keg in which they are to be sent, and when it is filled, and headed up tight, (if a keg,) the liquor is to be poured in until the vessel is full. The cork or bung should of course be made tight. Peron recommends, that corks

should be soaked in a mixture of three parts of wax and one of tallow melted together, and then sealed over by a mixture of four parts of pitch, one of sulphur, and one and a half of tallow, applied hot, and tied over with a piece of muslin while yet hot, some of the cement being subsequently poured over the muslin.

Artificial eyes, which have often been mentioned, are made of coloured enamel and glass, by means of a blow-pipe, or of small semi-spheres of glass painted suitably on the inside. They may be procured in the Eastern cities, or fabricated by those who understand the use of the enameller's lamp.

In conclusion, Gentlemen, let me entreat you to persevere in your highly laudable undertaking, until the Lexington Medical Society shall be as remarkable for her extensive cabinet of Natural History, as she now is for the energy of her members, and their zeal in the cause of science.

The time is fast approaching when many of you will leave these halls, loaded with your honours, never again perhaps to revisit it—these benches will again be filled by equally numerous classes, but like the momentary pictures of the kaleidoscope, new elements will enter into their composition, and those kind faces which now surround me, will perhaps gradually fade in the tablet of memory, until but scarce a misty image will remain of the present striking reality. But there are some things which will leave an impression too deeply imprinted to be effaced, and actions which have transpired in this society will consecrate the names of their performers. Your present zeal will leave the impression, that though the duties of your profession will have the first claim upon your time and attention, yet you will occasionally steal a calm moment from its toils, and from the blandishments of the domestic circle, to cull a flower from the rich parterre of nature, and mindful of the many pleasant and interesting hours you have spent in these halls, will transmit us many a remembrance, in the shape of a preparation of some natural object.



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